Abstract

Intracellular translocation of proteins, particularly protein kinase C (PKC) isoenzymes, provides a surrogate test system for determining toxicity of candidate compounds. The profile of translocation with respect to at least one and preferably two or more signal transduction proteins can be correlated with that of known toxins. In addition, databases of such profiles with respect to toxins of various types provide a useful set of standards for evaluating toxicity of candidate compounds. Moreover, to the extent that a toxin's profile mimics that found in a diseased state, the toxin can be used to construct screens for compounds alleviating the disease.